

Audience: Nurses and Health Care Workers

CDC: 2011-2012 Flu Season

Word Count: 1,427 (without references)

Fight flu at work and at home-- get the facts

Only 3 out of 5 Nurses and other Health Care Workers Get Vaccinated¹

Influenza is among the most common respiratory illnesses in the United States, infecting millions of people every flu season and hospitalizing more than 200,000 people. Between 1976 and 2006, estimates of yearly flu-associated deaths in the United States range from a low of about 3,000 to a high of about 49,000 people. As a health care worker on the medical front lines, you are just as vulnerable as anyone else for getting sick and spreading the flu to your patients, colleagues, and family members.

The flu can spread rapidly in health care settings. Flu transmission from patients to health care workers, and from health care workers to their families, other patients, and staff members is well documented.²⁻⁵ Influenza outbreaks have been documented in hospital wards, nursing home facilities, intensive care units, and bone marrow transplant units.

On the opposite side of the spectrum, high rates of vaccination among nurses and other health care workers have been linked to improved patient outcomes,^{6,7} reduced absenteeism⁸, and reduced influenza infection among staff. Vaccination remains the single best preventive measure available against influenza and can prevent transmission, illness and death.

Despite the documented benefits of flu vaccination of nurses and other health care workers, however, just over half of health care professionals receive an influenza vaccine each year. This low coverage jeopardizes the health of patients.

Health care workers should take everyday preventive actions and suggest the same to their patients. Routinely offer and/or recommend annual seasonal influenza vaccination to everyone 6 months of age and older throughout the flu season, which can last as late as May. Protect yourself, your family, and your patients—get a flu vaccine every season.

FLU FACTS

FACT: You cannot get the flu from the influenza vaccine. The flu shot does not contain live viruses, so it is impossible to get influenza from the vaccine, and the nasal spray contains viruses that are too weakened to cause full-blown flu illness. Mild side effects may occur in some people who get vaccinated

FACT: Influenza is more than just a nuisance. Influenza can be a serious and sometimes life-threatening disease. Influenza and its related complications can cause hospitalization and even death.

FACT: The timing of influenza seasons is unpredictable. Flu outbreaks can occur as early as October and continue until as late as May.

FACT: It takes about two weeks after vaccination for antibodies to develop in the body and provide protection against influenza virus infection. Therefore, CDC recommends vaccination efforts begin as soon as vaccine becomes available to ensure that as many people as possible are protected before flu season begins. Sometimes more than one influenza virus type or subtype will cause outbreaks in a community in a single year. As long as flu season isn't over, it's not too late to get vaccinated, even in January or later.

FACT: For optimal protection against influenza, annual vaccination is recommended, even if the composition of the vaccine does not change from one year to the next. Flu viruses are constantly changing so flu vaccines may be updated from one season to the next to protect against the viruses predicted to circulate the most during the coming flu season. Also, a person's immune protection from vaccination declines over time and annual vaccination is needed for optimal protection.

INFLUENZA TRANSMISSION, SYMPTOMS & TREATMENT

Most experts believe that flu viruses spread mainly by droplets made when people with the flu cough, sneeze or talk. These droplets can land in the mouths or noses of people who are nearby. Less often, a person might also get flu by touching a surface or object that has flu virus on it and then touching their own mouth, eyes or nose. Most healthy adults may be able to infect others beginning 1 day before symptoms develop and up to 5 to 7 days after becoming sick. Children may pass the virus for longer. People who have the flu often feel some or all of these symptoms:

- Fever or feeling feverish/chills
- Muscle aches or body aches
- Cough
- Headache
- Sore throat
- Fatigue (tiredness)
- Runny or stuffy nose
- Sometimes diarrhea and vomiting

Most people with the flu recover without needing treatment, however, there are flu antiviral drugs that can lessen symptoms and shorten the time you are sick by 1 or 2 days. Antiviral medications also can prevent serious flu complications. It's very important that antiviral drugs be used early to treat flu in people who are very sick (for example people who are in the hospital) and people who are sick with the flu and have a greater chance of getting serious flu complications, including:

- Children younger than 5, but especially children younger than 2 years old,
- Adults 65 years of age and older
- Pregnant women, and,
- People who have medical conditions including:
 - Asthma (even if it's controlled or mild)

- Neurological and neurodevelopmental conditions [including disorders of the brain, spinal cord, peripheral nerve, and muscle such as cerebral palsy, epilepsy (seizure disorders), stroke, intellectual disability (mental retardation), moderate to severe developmental delay, muscular dystrophy, or spinal cord injury].
- Chronic lung disease (such as chronic obstructive pulmonary disease [COPD] and cystic fibrosis)
- Heart disease (such as congenital heart disease, congestive heart failure and coronary artery disease)
- Blood disorders (such as sickle cell disease)
- Endocrine disorders (such as diabetes mellitus)
- Kidney disorders
- Liver disorders
- Metabolic disorders (such as inherited metabolic disorders and mitochondrial disorders)
- Weakened immune system due to disease or medication (such as people with HIV or AIDS, or cancer, or those on chronic steroids)
- People younger than 19 years of age who are receiving long-term aspirin therapy
- People with Chronic Obstructive Pulmonary Disease (COPD)
- People who are morbidly obese (Body Mass Index (BMI) of 40 or greater)
- Also, American Indians and Alaskan Natives seem to be at higher risk of flu complications

Flu antiviral drugs must be prescribed by a physician. Antiviral drugs are a second line of defense to treat flu illness, but a flu vaccine is the first and best way to prevent the flu.

Everyone 6 months and older is recommended to get vaccinated against the flu every year. There are several vaccine options available:

- The injection or intramuscular influenza vaccination (flu shot): an inactivated vaccine (containing killed virus) that is given with a needle, usually in the arm.
 - The regular flu shot is injected into the muscle, has been used for decades, and is approved for use in people 6 months of age and older including healthy people and people with chronic medical conditions.
 - The high-dose flu shot is also injected into the muscle and approved for use in adults 65 years of age and older.
 - The new intradermal flu shot is injected into the skin using a smaller needle than a regular flu shot and is approved for use in adults 18 through 64 years of age.
- The nasal spray or live intranasal influenza vaccine (LAIV): a vaccine made with live, weakened flu viruses is approved for use in healthy* people 2-49 years of age who are not pregnant. LAIV is a very good option for most health care providers who are healthy, younger than 50 years old, and not pregnant. Health care professionals should not get LAIV if they are providing medical care for patients who require special environments in the hospital because they are profoundly immunocompromised (e.g., those who work in bone marrow transplant units). Although no immunocompromised patient has shown to be harmed by use of LAIV among health care

workers, the recommendation against the use of LAIV in health care workers with this type of patient contact is intended as an extra precaution for fragile immunocompromised patients. Health care workers with this type of patient contact can get LAIV, but if they do, they should wait 7 days after being vaccinated before returning to duties that include care of severely immunocompromised patients in special environments.

** "Healthy" indicates persons who do not have an underlying medical condition that predisposes them to influenza complications.*

The role that you and other health care workers play in helping prevent influenza-related illness and death—especially in high-risk patients—is invaluable. Set a good example by getting your influenza vaccine every year and help spread flu facts instead of the flu to your colleagues, family members, and patients.

For more information about influenza and the influenza vaccines visit <http://www.cdc.gov/flu>, or call 1-800-CDC-INFO (800-232-4636).

References:

1. CDC. Influenza Vaccination Coverage Among Health-Care Personnel --- United States, 2010--11 Influenza Season. MMWR 60(32);1073-1077.
2. Weinstock DM, Eagan J, Malak SA, et al. Control of influenza A on a bone marrow transplant unit. Infect Control Hosp Epidemiol 2000;21:730-2.
3. Cunney FJ, Bialachowski A, Thornley D, Smaill FM, Pennie RA. An outbreak of influenza A in a neonatal intensive care unit. Infect Control Hosp Epidemiol 2000;21:449-54.
4. Salgado CD, Farr BM, Hall KK, Hayden FG. Influenza in the acute hospital setting. Lancet Infect Dis 2002; 2:145-55.
5. Sartor C, Zandotti C, Romain F, et al. Disruption of services in an internal medicine unit due to nosocomial influenza outbreak. Infect Control Hosp Epidemiol 2002; 23:615-9.
6. Thompson WW, Shay DK, Weintraub E, et al. Influenza-associated hospitalizations in the United States. JAMA 2004;292:1333-1340.
7. Thompson WW, Shay DK, Weintraub E, et al. Mortality associated with influenza and respiratory syncytial virus in the United States. JAMA 2003; 289:179-186.
8. Molinari NM, Ortega-Sanchez IR, Messonnier ML, et al. The annual impact of seasonal influenza in the US: measuring disease burden and costs. Vaccine 2007;25:5086-5096